

## REMARKS

### INTRODUCTION:

In accordance with the foregoing, claim 13 has been amended, and claims 20-23 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-2, 4-8, 10-11, 13-15, and 17-23 are pending and under consideration.

### REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 2, item 1, the Examiner rejected claims 1, 2, 4-8, 10, 11, 13-15 and 17-19 under 35 U.S.C. §103(a) as being unpatentable over Rahamim et al. (U.S. Patent No. 6,081,586 – hereinafter Rahamim) in view of Dahan et al., (US Patent No. 6,611,580 – hereinafter Dahan), Ueltzen et al. (US Patent No. 5,430,793 – hereinafter Ueltzen), or Frantz et al. (US Patent No. 5,802,169 – hereinafter Frantz). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

Independent claim 1 recites: "...a processor configured to: automatically detect an impedance characteristic of a telephony network to which the communication apparatus is connected;...and combine data to be transmitted over said telephony network with said selected set of impedance control values...."

Independent claim 7 recites: "...means for automatically detecting an impedance characteristic of a telephony network to which the communication apparatus is connected;...means for combining data to be transmitted over said telephony network with said selected set of impedance control values...."

Independent claim 11 recites: "...automatically detecting an impedance characteristic of the telephony network to which the interface port is interfaced;...combining data to be transmitted over said telephony network with said selected set of impedance control values...."

And independent claim 15 recites: "...automatically detecting an impedance characteristic of said telephony network;...and combining values from said selected set of impedance control values with data that is to be communicated from said interface port to a remote communication device.

The Examiner appears to assert that Rahamim teaches each element of the independent claims, "but fails to teach 'automatic'...." Additionally, the Examiner appears to assert that each of Dahan, Ueltzen, and Frantz cure this defect. Applicant respectfully disagrees.

Rahamim discloses a “programmable measurement circuitry 156...with adjustable parameters for measuring tip/ring voltage and loop current conditions on the lines of the telephone network 110.” (Rahamim col. 8, lines 13-16). Rahamim also discloses: “[p]rogrammable line/ring impedance circuitry 162 is also provided to allow the DAA or host system circuitry 116 to program the electrical characteristics of the DAA as seen by the telephone network 110 to facilitate compliance with a variety of regulatory standards, including country-by-country ring loading.” (Rahamim col. 8, lines 31-34). But the programmable measurement circuitry 156 does not detect an impedance characteristic of a telephony network, either manually or automatically. Further, while the programmable line/ring impedance circuitry 162 may modify an impedance of the device disclosed in Rahamim, it does not combine data to be transmitted over a telephony network with impedance control values.

Dahan discloses a modem that measures line voltage and determines whether the line voltage is sufficient to allow the modem to operate. If not, the modem incrementally modifies the loophold current in an attempt to set up initial operating conditions for the modem. If the modem reaches a minimum desired loophold current and has not yet achieved a sufficient line voltage, the modem adjusts an impedance of a gyrator circuit and again measures the line voltage. If the gyrator impedance reaches a maximum and the measured line voltage is still too low, the modem aborts the attempt to communicate. Additionally, Dahan discloses that the modem could adjust the gyrator impedance first and then adjust the loophold current. (See Dahan, at col. 9, line 41 to col. 10, line 45).

Ueltzen discloses a device that receives a sample dial tone from a telephone network interface 242 and compares the sample dial tone with pre-stored dial tone signatures, to attempt to match the sample with a pre-stored dial tone signature, and set the initial communication parameters of the device. (See Ueltzen, at col. 9, lines 41-63).

Frantz discloses a device that transmits a series of tones, each tone being a single test frequency, and measures reflected power at each frequency. Then the device calculates an actual return loss measurement for each frequency, and attempts to match the return loss measurements with a predetermined impedance model. (See Frantz, at col. 5, lines 6-44).

Applicant respectfully submits that Rahamim, either alone or in combination with any of Dahan, Ueltzen, or Frantz, neither discloses nor suggests “...a processor configured to: automatically detect an impedance characteristic of a telephony network to which the communication apparatus is connected;...and combine data to be transmitted over said telephony network with said selected set of impedance control values....”

Applicant respectfully submits that independent claims 1, 7, 11, and 15 patentably

distinguish over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicant respectfully submits that claims 2, and 4-6, which ultimately depend from independent claim 1, claims 8 and 10, which depend from independent claim 7, claims 13 and 14, which depend from independent claim 11, and claims 17-19, which ultimately depend from independent claim 15, should be allowable for at least the same reasons as claims 1, 7, 11, and 15, respectively, as well as for the additional features recited therein.

#### NEW CLAIMS

Applicant respectfully submits that for at least similar reasons as those stated in the section regarding the rejection under 35 U.S.C. §103, new claims 20-23, which depend from independent claims 1, 7, 11, and 15, respectively, patentably distinguish over the cited art and should be allowable.

Regarding claims 20-23, by "...wherein the impedance characteristic...comprises at least one of an AC line impedance, a network balance impedance, a DC line impedance, or a ringer impedance," Applicant is claiming that the impedance characteristic comprises at least one of the four enumerated items, and may comprises more than one of the four enumerated items.

#### CONCLUSION:

In accordance with the foregoing, Applicant respectfully submits that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

Respectfully submitted,

Date 10 Sept 2004

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